**Maths (Advocate: Thiago Viana)**

**P1: Calculate the greatest common divisor and least common multiple of a given pair of numbers.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#1-how-to-calculate-the-greatest-common-divisor-and-least-common-multiple>  **COMPLETED** |
| The link above points to a section of my maths repository that explains how to calculate the GCD and LCM of a pair of given numbers. |

**P2: Use relevant theory to sum arithmetic and geometric progressions.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#3-algorithm-to-calculate-arithmetic-and-geometric-progressions>  **COMPLETED** |
| This link points to a section of my maths repository that shows an algorithm that sums arithmetic and geometric progressions. |

**P3: Deduce the conditional probability of different events occurring within independent trials.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#4-deduce-the-conditional-probability-of-different-events-occurring-within-independent-trials>  **COMPLETED** |
| This link points to a section of my maths repository that explains how to calculate the probability of rolling a certain number with 2 dice. |

**P4: Identify the expectation of an event occurring from a discrete, random variable.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#2-expectation-of-an-event-occurring-from-a-discrete-random-variable>  **COMPLETED** |
| This link points to a section of my maths repository that shows how to work out the probability of a random integer being divisible by 5, which is 1 in 5. |

**P5: Identify simple shapes using co-ordinate geometry.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#5-identify-simple-shapes-using-co-ordinate-geometry>  **COMPLETED** |
| The above link points to a section of my maths glossary that explains how to identify simple shapes using co-ordinate geometry and gives examples on different formulae you can use. |

**P6: Determine shape parameters using appropriate vector methods.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#6-determine-shape-parameters-using-appropriate-vector-methods>  **COMPLETED** |
| The above link points to a section of my maths glossary that provides an algorithm for determining shape parameters using appropriate vector methods |

**P7: Determine the rate of change within an algebraic function.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#7-determine-the-rate-of-change-within-an-algebraic-function>  **COMPLETED** |
| The above link points to a section of my maths glossary that explains what the rate of change is and how to determine it within an algebraic function. |

**P8: Use integral calculus to solve practical problems involving area.**

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| <https://github.com/MarkB19988/Maths/blob/master/README.md#8-use-integral-calculus-to-solve-practical-problems-involving-area>  **COMPLETED** |
| The above link points to a section of my maths glossary that explains how to use integral calculus to determine area of complex shapes. |

**M1: Identify multiplicative inverses in modular arithmetic.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |

**M2: Calculate probabilities within both binomially distributed and normally distributed random variables.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |

**M3: Evaluate the coordinate system used in programming a simple output device.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |

**M4: Analyse maxima and minima of increasing and decreasing functions using higher order derivatives.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |

**D1: Produce a detailed written explanation of the importance of prime numbers within the field of computing.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |

**D2: Evaluate probability theory to an example involving hashing and load balancing.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |

**D3: Construct the scaling of simple shapes that are described by vector coordinates.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |

**D4: Justify, by further differentiation, that a value is a minimum.**

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| Please use this section to provide all appropriate, valid and checked http Links that point to your evidence; use multiple lines to separate multiple links |
| **To Be Completed (Not Yet Covered In Class)** |